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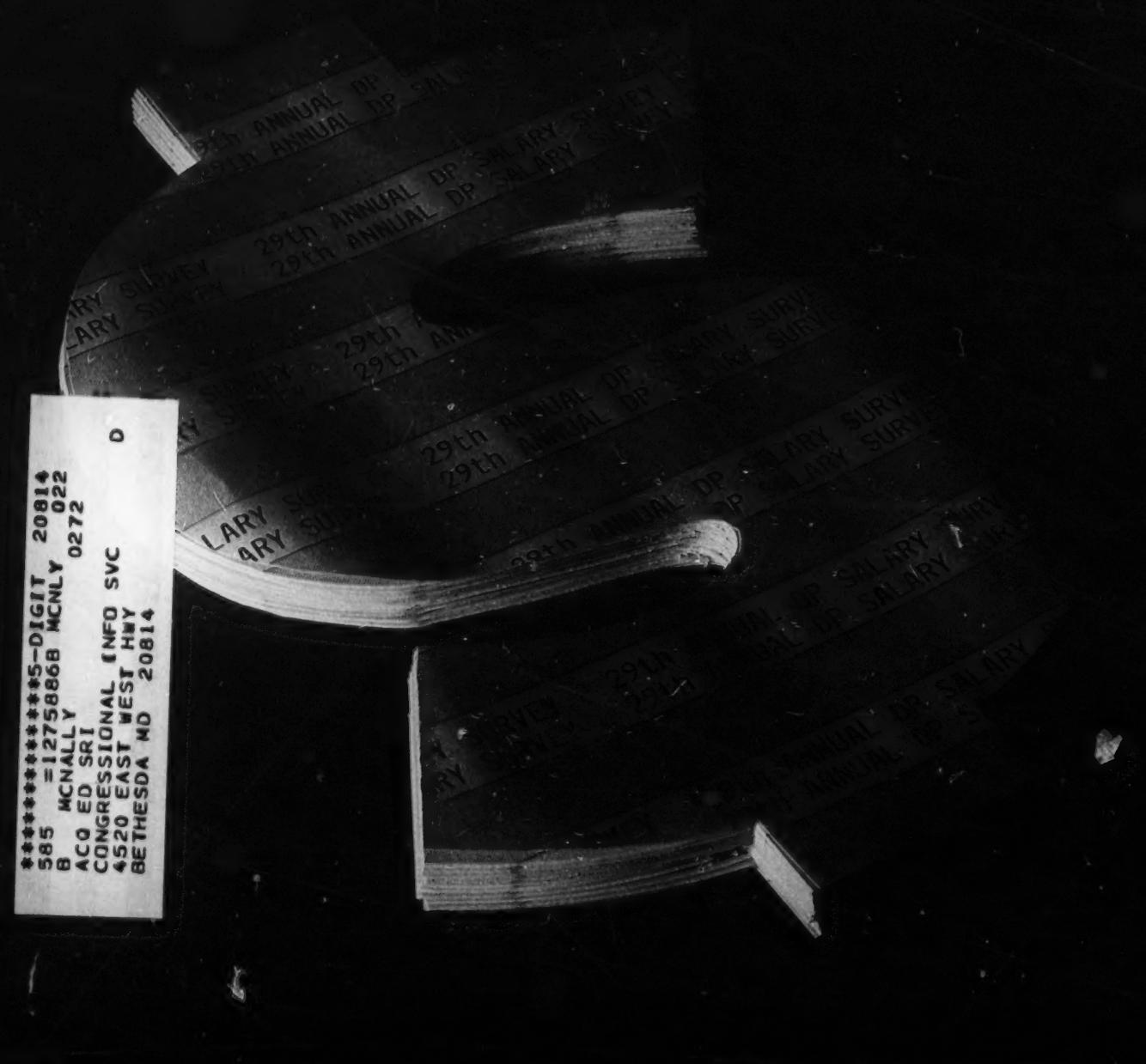
INFOSYSTEMS

Evolving Role of the Mainframe • Disaster Recovery
Manufacturing Software • Building a Data Center

The More Things Change


29th ANNUAL DP SALARY SURVEY
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ABP BPA

24

FEATURES

24
29th Annual DP Salary Survey: **The More Things Change**
Salaries changed slightly this year in the face of what may be monumental changes for the way DP delivers its services.

30
The Corporate Micro: **Picking Pockets of Federal Expertise**
A microcomputer center is at the hub of the US Commerce Dept.'s effort to support decision-making with quality data.

34
Inforum: **What Do Users Really Want?**

38
Disaster Recovery: No Longer the 'Loneliest People in the World'
In need of practical advice, your peers are forming groups to exchange contingency planning information.

42
The Evolving Role of Mainframes
Managers seeking ways to distribute systems may find the mainframe their most versatile tool.

30

48
Snyders on Software: **Computerized Engineering**

50
Manufacturing Software: Many Paths to the Same End

54
An Ounce of Prevention
Although the effect of VDTs on human health has yet to be decided, cautious IS managers may want to develop their own policies regarding maintenance and monitoring.

57
Sake of Security: **A Security Vendor's Responsibilities**

58
Single Service Call
Although data center design specialists claim there is a trend toward a one-vendor center, it is questionable whether it can be achieved.

62
The Virtual Workstation
A hardware- and software-independent architecture will one day support integrated data, text, voice and image information.

66
Application Reports: **In Search of Solutions**
State-of-the-art hardware or software is no longer a DP status symbol. Whether printers or programming tools, success comes from matching the product to the problem.

72
Data Center Service-Level Agreements
If done properly, a service-level agreement can build a partnership between IS and its users based on realistic expectations.

INSIDE INFO

10 Strain may be developing between government, commercial sectors
12 Table-driven package saves Security Pacific millions of dollars
12 Service helps protect software investment
14 We should not be satisfied with competition level in all sectors
15 CEO's knowledge of computers influenced by IS position
16 Help for SNA shortcomings? One vendor says it has the connection
16 Electronic publishing more than a pretty page

DEPARTMENTS

4 Feedback
8 Editor's Perspective
21 IN Brief
22 Arnie
74 Products/Services Info

Management

CEO's knowledge of computers influenced by IS position

A chief executive's knowledge about computers is strongly influenced by the organizational position of the firm's information systems (IS) head. That's the conclusion of a recent study conducted by the Chicago accounting firm of Altschuler, Melvoin & Glasser.

Presidents and chief executive officers (CEOs) from the 200 largest public and private corporations in Illinois were interviewed on such issues as computer literacy, satisfaction, and dependency on computers.

In firms where the head of IS is part of senior management, CEOs tend to be more knowledgeable about corporate computer systems, more aware of the firm's dependence on computers, and more likely to develop contingency plans to safeguard against possible shutdowns. They are also more likely to buy the same computer systems again.

On the other hand, when IS heads are middle managers, CEOs are less satisfied with their knowledge of the firm's computer systems, and less aware of how the firm depends on computers. They also feel unqualified to evaluate whether they'd invest in their current computer systems again.

All firms surveyed are active computer users. The IS head is a member of senior management in 40 percent of the firms surveyed, and a middle manager in 60 percent.

CEO Satisfaction

	Percent of respondents:	
	With IS part of senior management	With IS part of middle management
Satisfaction with knowledge of computer systems operation:		
Very satisfied	17	10
Satisfied	72	55
Dissatisfied	11	35
Satisfaction with knowledge of information generated by systems:		
Very satisfied	28	10
Satisfied	67	71
Dissatisfied	11	19

In 58 percent of the firms that have IS in a senior management position, the manager reports to the president or CEO. In 26 percent of those firms, the manager reports to an executive vice president.

Of the IS heads who are middle managers, almost half report to a controller, chief financial officer or vice president of finance. About one-fourth report to the president or CEO.

The greater computer knowledge of CEOs who have IS managers in senior positions is perhaps due to greater interaction between the two. This was not conclusively determined by the study, however.

The complete report is available for $10. For more information, enter No. 7 on the Reader Information Card.

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29th Annual DP Salary Survey

The More Things Change

Salaries changed slightly this year in the face of what may be monumental changes for the way DP delivers its services.

■ *By Wayne L. Rhodes Jr. Editor*

Respondents to INFOSYSTEMS' 29th Annual Data Processing (DP) Salary Survey report a pay increase of just under three percent this year. That nearly triples the increase reported a year ago, but is still well below historic patterns. This year's raise (2.8 percent) seems in line with more traditional measures, such as the cost-of-living index, for determining salaries.

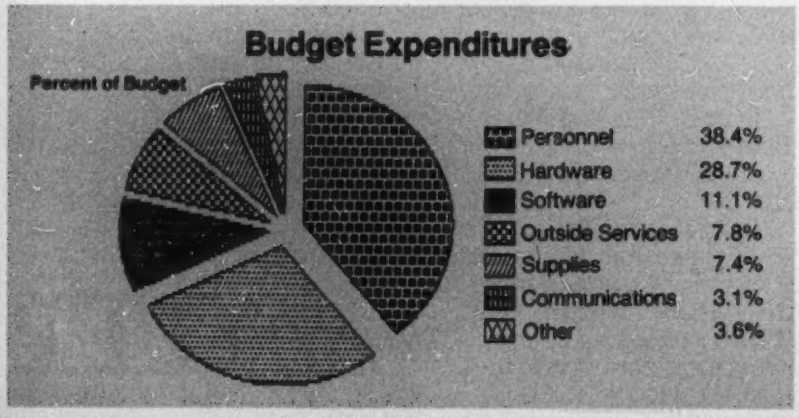
Increases range from two percent for a data entry supervisor, up to 19.6 percent for a project/team leader. Only one other position reports a double-digit increase in salary. That is data/telecommunications manager. The top information systems (IS) official's average salary went up 5.6 percent; the manager of data processing went up 7.3 percent.

Several positions actually report lower salaries in 1987 than in 1986. This usually indicates new people being paid at entry levels for those jobs. Those positions reporting lower salaries in 1987 include applications programmer, manager of data base systems, communications operator, data entry operator and office automation specialist.

Information center analyst/trainer reports a 3.2 percent increase. Other related positions, such as manager of microcomputers and information center manager, for example, came in lower this year. That probably means entry-level people are being assigned those positions due to the relative newness of the jobs. It also may indicate some uncertainty as to what salaries those jobs should command.

Over 7,000 jobs reported on. Hitchcock Research Services of Wheaton, IL, conducted the survey. Ray Winkler, director of Hitchcock Research Services, prepared the questionnaire and analyzed results. The survey contains information on 7,692 jobs. The information comes from 595 firms selected at random from INFOSYSTEMS' circulation across the nation. Salaries are based on those in effect as of March 1. They include full-time personnel only. Figures do not include bonuses and other benefits.

The top IS official's average weekly salary is $1,131. The highest reported salary for that position is $175,000. Six people report salaries exceeding $100,000. Three others say their salary ranges could take them above $100,000. One of those reporting a salary of $120,000 is the president of a DP-oriented business. The others all have titles such as senior vice president (2), executive vice president, director of MIS (2), vice president of DP



and general manager of information technology.

The second highest salary goes to the data/telecommunications manager ($879 per week). That position also reports one of the highest increases in salary from last year. This is, of course, indicative of the attention that communications and networking are getting throughout the computer industry. People who can manage this area are in demand both on the user and vendor fronts.

The lowest reporting group of salaries is in computer operations. Salary increases are low here also. The only exception is the tape librarian. The salary for this position went up 8.4 percent. Overall, however, the survey underscores that data center operations have matured in relation to other computer-based activities. Companies are looking for cost efficiencies there while they turn their attention to other forms of computing such as departmental.

The financial industry reports the highest average salary for the top IS official and the lowest salary for applications programmers. The public utilities sector consistently ranks among the best payers in virtually every job.

Largest budget item. Salaries still make up the largest share of the DP budget at 38.4 percent. That share has been steadily declining, however, during the past four years. Personnel costs as a share of budget are at the lowest they have been in nine years. The next largest budget item is hardware and its maintenance at 28.7 percent. Software expenditures have been steadily increasing during the past four years, going from 9.5 to 11.1 percent of the budget. No other item exceeds eight percent.

Data processing employees make up approximately three percent of their organization's total employment. The average number of people in the reporting companies is 736. The average number of DP employees is 24. Hitchcock breaks employment down by equipment rental range. For example, a company whose equipment rental is under $3,000 per month has 241 employees overall, with three in DP. By comparison, a company with a $100,000 to $149,000 range has 39 DP employees out of 1,776 overall. That's 1.3 percent and 2.1 percent, respectively.

Over half of the companies reported turnover in their organizations. That has been pretty consistent during the past four years. The percentage of new employees, however, climbed notably from last year. This year, respondents reported 23.3 percent of their employees are new; last year they reported 13.5 percent.

Last year's survey reported virtually no change in overall salaries after several years of impressive growth. That may have prompted employees to look elsewhere for salary increases. The more than 20 percent turnover is reminiscent of the job changing associated with data processing in the 1970s.

Over a quarter of the respondents said they have unfilled positions. These average 3.1 per company. During the four years this question has been asked, the number of respondents has been relatively constant (23.2 to 26.2 percent). The number of unfilled positions has alternated between just over two and just over three.

In a new survey question, Hitchcock tried to determine how people are assigned to different functions. It finds an average of 6.4 people assigned to computer operations and 5.5 people involved in systems analysis/programming, for example.

Opportunity to comment. Hitchcock gave respondents an opportunity to comment on the survey. Their comments give valuable insight into the state of DP.

"Good minicomputers are nearly 'operatorless' systems," writes a respondent. "An organizational structure can vary from one location to another. We have three large-scale platterns and our two computer operators are really plattern operators. They not only run the system, reboot, take backup and maintain the tape library, but they produce ink on media plots 36x48 inches. They are more skilled than data entry personnel, but do enter data. We have not found an adequate title for them either."

"We are changing to decentralized data processing with computer hardware now located in various departments and division offices," says a writer. "Our data processing department personnel are switching toward becoming 'value added resellers' or a 'systems house' selling both hardware and software within our company (to divisions) and outside of the company (to customers). We now do very little computer operations, but [train others] to do it part-time."

"Data entry is almost a thing of the past," asserts a respondent.

All entry work has been spread to the user departments, reports another. "We have seven printers not in DP," this person writes. "All A/P, A/R, census data, inventory and a special word processing application are done at other offices on-line (hard wired) to the computer. All but one programmer are part-time employees moonlighting. The manager of systems/programming and I spend 50 percent plus [of our time] programming."

A respondent says the survey form is difficult to answer when systems/programming staff and information

Number of Employees in DP vs. Company

(By equipment rental range)

Rental Range Per Month	Average Number in DP	Average Number in Company
Under $3,000	3.2	241.2
$3,000 to $4,499	4.9	289.8
$4,500 to $5,999	5.4	325.0
$6,000 to $8,999	6.4	339.7
$9,000 to $11,999	6.6	340.0
$12,000 to $14,999	7.9	356.8
$15,000 to $17,999	11.4	551.7
$18,000 to $24,999	19.4	768.4
$25,000 to $49,999	20.1	810.0
$50,000 to $74,999	20.7	1092.6
$75,000 to $99,999	36.8	1351.7
$100,000 to $149,999	36.8	1776.3
$150,000 and over	176.6	3004.0
Not Available	39.9	1039.4
All Companies	**24.9**	**736.4**

Functional Responsibility

Functional Area	Percent Having People Assigned	Average Number of People Assigned
DP/MIS Management	92.4%	2.8
Systems Analysis and/or Programming	67.8%	5.5
Applications Programming	48.2%	12.4
Computer Operations	84.2%	6.4
Information Center	19.5%	3.7
Data-Telecomm.	20.4%	5.1
Training	16.3%	2.8
Data Entry	45.7%	4.9
Other	19.9%	9.0
TOTAL	**160.0%**	**24**

29th Annual DP Salary Survey
Average Reported Weekly Salaries by Geographic Area

Job Description	Job Code	New England ME, VT, NH, MA, CT, RI	Mid Atlantic NY, PA, NJ	So. Atlantic WV, MD, DE, VA, NC, SC, GA, FL, DC	East North Central MI, WI, IL, IN, OH	East South Central KY, TN, MS, AL	West North Central ND, MN, SD, NE, IA	West South Central TX, OK, AR, LA	Mountain UT, MT, CO, NV, WY, CO, AZ, NM	Pacific WA, OR, CA	1985	1986	National Average Comparison Increase Decrease
MANAGEMENT		(28)	(90)	(57)	(157)	(13)	(46)	(49)	(18)	(97)	(633)	(558)	—(No. Firms)
Top MIS Official	(01)	1361	1327	1038	1088	1002	994	973	**	1147	1071	1131	+5.6
Manager of Data Processing	(02)	838	875	832	824	706	715	829	713	836	764	820	+7.3
Assistant Manager of Data Processing	(03)	653	752	793	858	**	488	866	**	829	734	799	+8.9
Manager of Data Base Systems	(04)	1071	770	881	831	**	483	**	**	963	742	725	−2.3
SYSTEMS ANALYSIS													
Manager/Supervisor of Systems Analysis	(05)	874	853	865	903	**	628	879	**	828	750	820	+9.3
Systems Analyst	(06)	700	665	747	663	572	592	717	691	706	631	687	+8.9
APPLICATIONS PROGRAMMING													
Manager/Supervisor of Applications Programming	(07)	825	759	900	765	669	607	844	771	814	741	796	+7.4
Applications Programmer	(08)	538	575	600	385	479	485	617	589	653	538	478	−11.2
DATA/TELECOMMUNICATIONS													
Data/Telecommunications Manager	(09)	**	878	870	957	**	**	820	**	812	774	879	+13.6
Communications Analyst	(10)	**	675	572	746	**	451	666	**	614	658	682	+3.6
Communications Operator	(11)	375	**	438	264	**	257	591	**	457	426	323	−24.2
COMPUTER OPERATIONS													
Data Center Manager	(12)	728	699	659	650	570	576	692	602	693	670	663	−1.0
Computer Operator	(13)	382	365	437	380	323	344	403	370	402	367	386	+5.2
Computer Input/Output Control Manager	(14)	427	447	424	466	**	396	603	**	414	423	440	+4.0
Tape Librarian	(15)	**	326	421	481	**	**	313	**	370	346	375	+8.4
Data Entry Supervisor	(16)	448	408	439	423	387	331	454	**	455	401	409	+2.0
Data Entry Operator	(17)	335	334	332	275	264	260	293	313	343	308	301	−2.3
OTHER													
Project/Team Leader	(18)	787	825	820	839	**	711	814	648	**	678	811	+19.6
Information Center Manager	(19)	**	648	708	813	**	737	**	**	**	743	729	−1.9
Information Center Analyst/Trainer	(20)	547	538	585	604	**	493	**	**	542	534	551	+3.2
Manager of Microcomputers	(21)	468	473	**	565	**	538	**	513	**	616	575	−6.7
End User Computer Specialist/Office Automation Specialist	(22)	426	445	333	494	455	332	**	499	481	537	443	−17.5

NI = Not included **Indicates insufficient information available

center staff is distributed throughout the country. "An example is my company," the writer says. "Louisville, KY, total 72 professionals; Cincinnati, OH, 17 professionals; Port Arthur, TX, three; Houston, eight; Clinton, IA, five; Morris, IL, five; and Chicago, 19. All are on the headquarters IS budget and report directly to headquarters IS."

Another respondent has created a position: Systems Coordinator. This individual maintains all vendor systems software releases on three machines; designs data bases; writes special functional routines in Cobol to store and retrieve data base records; and monitors three programmers.

Comments emphasize overall that data processing is in a constant state of flux. Positions and responsibilities change, but the more they change the more the underlying reason for being stays the same: providing computer-based services. Where once it was strictly data processing, now it is information services. Some telling pieces of information about change, however, bear pointing out. Only 8.3 percent of the companies even use a title suggestive of IS management; DP is still the formal name of the game. Despite press and vendor hoopla to the contrary, most DP/IS managers do not report directly to the top. That only happens in 43 percent of the cases. And that, by the way, is down 10 percent since 1979. (15)

Salary Breakouts

A comprehensive breakout of salary information can be found in chart form on the following pages. The breakout is by geographic area, by size of installation and by industry (15)

Complete DP Salary Survey

A complete copy of INFOSYSTEMS' 1987 DP Salary Survey can be ordered for $50. The report includes replies to the 17 questions in the study by industry and equipment rental range, as well as salary data for the 22 job functions. Send check or company purchase order to Hitchcock Executive Book Service, 25W550 Geneva Rd., Wheaton, IL 60188.

Job Descriptions Available

Detailed job descriptions for the 22 DP positions surveyed are available free of charge. For a copy, enter No. 20 on the Reader Information Card.

29th Annual DP Salary Survey
Average Reported Weekly Salaries by Industry

Job Description	Job Code	Advertising, Printing & Publishing	Banking	Educational	Engineering, Construction	Governmental Agencies	Hospital, Health Care	Insurance	Financial	Public Utilities	Retail Sales & Distrib.	Data Proc. Services
MANAGEMENT		(29)	(12)	(51)	(12)	(60)	(32)	(20)	(9)	(8)	(17)	(8)
Top MIS Official	(01)	1329	**	868	725	801	1020	1476	1685	1592	1073	**
Manager of Data Processing	(02)	880	823	687	684	783	673	906	1237	1244	722	711
Assistant Manager of Data Processing	(03)	612	596	602	**	771	640	726	1161	898	**	**
Manager of Data Base Systems	(04)	**	**	**	**	699	**	484	836	1087	**	**
SYSTEMS ANALYSIS												
Manager/Supervisor of Systems Analysis	(05)	874	779	783	**	772	691	680	951	965	**	776
Systems Analyst	(06)	724	514	566	**	682	563	595	745	697	597	772
APPLICATIONS PROGRAMMING												
Manager/Supervisor of Applications Programming	(07)	641	603	592	**	630	**	808	758	948	779	**
Applications Programmer	(08)	463	537	471	445	535	467	552	330	673	456	565
DATA/TELECOMMUNICATIONS												
Data/Telecommunications Manager	(09)	**	**	**	**	706	**	**	1072	927	**	**
Communications Analyst	(10)	**	**	**	**	483	**	**	759	728	**	**
Communications Operator	(11)	**	330	**	**	516	**	**	260	**	**	**
COMPUTER OPERATIONS												
Data Center Manager	(12)	612	538	619	**	640	580	682	761	892	486	**
Computer Operator	(13)	417	277	347	310	358	333	463	373	506	331	354
Computer Input/Output Control Manager	(14)	537	429	377	**	461	377	385	**	606	383	**
Tape Librarian	(15)	**	**	**	**	315	**	384	**	376	**	**
Data Entry Supervisor	(16)	348	**	374	**	460	382	329	**	516	343	**
Data Entry Operator	(17)	303	211	299	266	341	292	325	227	392	270	311
OTHER												
Project/Team Leader	(18)	790	**	**	**	679	667	693	**	800	**	**
Information Center Manager	(19)	453	**	561	**	634	**	**	**	767	**	**
Information Center Analyst/Trainer	(20)	**	**	**	**	439	**	516	576	728	**	**
Manager of Microcomputers	(21)	**	**	345	**	469	**	**	**	543	**	**
End User Computer Specialist/Office Automation Specialist	(22)	**	375	344	**	439	448	400	518	**	**	**

Job Description	Job Code	Other Services (non-DP)	Transportation	Wholesale Sales & Distrib.	Manufacturing and Processing: Electrical, Electronic	Food, Tobacco, Drugs	Machinery, Instruments, Equip.	Metal Producing & Fab.	Apparel, Textiles	Lumber, Wood, Furn., Paper	Chemicals, Petro., Coal	Rubber, Leather, Glass, Clay	Other
MANAGEMENT		(28)	(10)	(30)	(27)	(22)	(47)	(39)	(11)	(12)	(15)	(17)	(19)
Top MIS Official	(01)	1135	1206	1208	1063	1198	1207	981	1087	1019	1471	**	921
Manager of Data Processing	(02)	711	710	768	936	759	841	768	931	864	832	678	736
Assistant Manager of Data Processing	(03)	629	**	**	**	**	**	**	**	**	**	**	**
Manager of Data Base Systems	(04)	**	**	**	929	**	**	**	**	**	**	**	**
SYSTEMS ANALYSIS													
Manager/Supervisor of Systems Analysis	(05)	816	**	853	782	966	770	**	**	**	927	788	**
Systems Analyst	(06)	623	728	736	731	710	672	623	758	739	770	650	674
APPLICATIONS PROGRAMMING													
Manager/Supervisor of Applications Programming	(07)	**	910	688	821	637	844	**	**	**	**	**	737
Applications Programmer	(08)	566	690	531	571	539	598	547	568	570	648	516	567
DATA/TELECOMMUNICATIONS													
Data/Telecommunications Manager	(09)	**	873	615	**	**	**	**	**	**	**	**	**
Communications Analyst	(10)	**	605	**	**	652	**	**	**	**	674	**	**
Communications Operator	(11)	524	417	**	**	**	**	**	**	**	621	**	**
COMPUTER OPERATIONS													
Data Center Manager	(12)	**	**	744	803	686	621	539	687	**	859	470	**
Computer Operator	(13)	374	399	330	370	384	402	346	448	393	439	296	371
Computer Input/Output Control Manager	(14)	**	431	**	**	455	470	**	**	**	530	**	**
Tape Librarian	(15)	**	462	**	**	**	**	**	**	**	**	**	455
Data Entry Supervisor	(16)	438	**	391	302	439	347	403	**	**	**	**	334
Data Entry Operator	(17)	294	363	270	**	309	313	335	**	252	332	271	**
OTHER													
Project/Team Leader	(18)	**	875	**	**	**	**	**	**	**	**	**	**
Information Center Manager	(19)	**	892	**	**	**	**	**	**	**	**	**	**
Information Center Analyst/Trainer	(20)	512	619	**	548	**	**	**	**	**	795	**	**
Manager of Microcomputers	(21)	569	**	512	**	**	**	**	**	**	**	**	**
End User Computer Specialist/Office Automation Specialist	(22)	530	**	**	**	**	503	**	**	**	**	**	**

—(No. Firms)

**Indicates insufficient information available

29th Annual DP Salary Survey

Weekly Salaries for All Jobs: Nationwide and by Size of Installation

Job Description	Job Code	Number Reported	Lowest Reported Actual Salary	25th Percentile Actual Salary	National Average Actual Salary	Median Actual Salary	Mode Actual Salary	75th Percentile Actual Salary	Highest Reported Actual Salary	Established Salary Range—Average Low	Established Salary Range—Average High
		NATIONAL STATISTICS									
MANAGEMENT											
Top MIS Official	(01)	163	384	865	1131	1078	1153	1269	2403	910	1194
Manager of Data Processing	(02)	435	317	635	820	800	961	961	1842	675	958
Assistant Manager of Data Processing	(03)	105	267	617	799	865	888	900	1500	604	870
Manager of Data Base Systems	(04)	86	317	450	725	711	384	1038	1448	739	1056
SYSTEMS ANALYSIS											
Manager/Supervisor of Systems Analysis	(05)	233	408	673	820	826	576	961	1500	670	962
Systems Analyst	(06)	706	279	576	687	686	692	769	1292	536	803
APPLICATIONS PROGRAMMING											
Manager/Supervisor of Applications Programming	(07)	207	278	615	796	800	888	888	1826	658	930
Applications Programmer	(08)	2610	230	346	478	423	346	611	1250	408	677
DATA/TELECOMMUNICATIONS											
Data/Telecommunications Manager	(09)	50	442	746	879	902	923	995	1192	650	942
Communications Analyst	(10)	126	346	576	682	692	692	788	1015	478	763
Communications Operator	(11)	104	200	269	323	307	269	384	673	317	497
COMPUTER OPERATIONS											
Data Center Manager	(12)	179	240	525	663	634	576	798	1293	558	811
Computer Operator	(13)	1226	161	326	386	384	346	465	946	299	455
Computer Input/Output Control Manager	(14)	111	250	360	440	426	423	461	823	343	517
Tape Librarian	(15)	60	223	269	375	346	269	410	807	295	432
Data Entry Supervisor	(16)	108	200	326	409	384	307	480	846	344	496
Data Entry Operator	(17)	786	105	238	301	291	173	355	596	247	363
OTHER											
Project/Team Leader	(18)	111	484	709	811	817	817	894	1184	644	946
Information Center Manager	(19)	46	326	576	729	735	769	863	1332	651	955
Information Center Analyst/Trainer	(20)	123	274	426	551	507	500	642	1011	436	694
Manager of Microcomputers	(21)	33	140	493	575	552	576	631	923	521	755
End User Computer Specialist/Office Automation Specialist	(22)	84	197	352	443	428	384	519	884	371	584

Job Description	Job Code	Under $1,000 Mo.	$1,000-$2,499 Mo.	$2,500-$4,999 Mo.	$5,000-$7,999 Mo.	$8,000-$11,999 Mo.	$12,000-$14,999 Mo.	$15,000-$17,999 Mo.	$18,000-$24,999 Mo.	$25,000-$49,999 Mo.	$50,000-$74,999 Mo.	$75,000-$99,999 Mo.	$100,000-$149,999 Mo.	$150,000 and over
		AVERAGE SALARY—BY EQUIPMENT RENTAL RANGE												
MANAGEMENT		(72)	(41)	(49)	(51)	(59)	(39)	(29)	(39)	(76)	(28)	(10)	(12)	(33)
Top MIS Official	(01)	677	1125	924	1011	1032	1209	867	1179	1265	1097	977	1445	1470
Manager of Data Processing	(02)	619	720	751	752	792	855	727	826	891	977	882	1061	1184
Assistant Manager of Data Processing	(03)	**	651	**	**	665	741	**	522	654	871	**	986	932
Manager of Data Base Systems	(04)	**	**	**	**	**	**	**	498	808	**	702	909	999
SYSTEMS ANALYSIS														
Manager/Supervisor of Systems Analysis	(05)	**	600	**	873	708	840	720	651	826	832	**	820	975
Systems Analyst	(06)	535	535	607	610	622	667	613	712	683	671	593	704	737
APPLICATIONS PROGRAMMING														
Manager/Supervisor of Applications Programming	(07)	**	**	**	576	651	774	652	776	835	614	524	**	936
Applications Programmer	(08)	446	463	567	547	485	537	481	591	550	524	441	536	446
DATA/TELECOMMUNICATIONS														
Data/Telecommunications Manager	(09)	**	**	**	**	**	**	**	836	718	779	689	**	961
Communications Analyst	(10)	**	**	**	608	**	627	**	624	541	700	696	**	727
Communications Operator	(11)	**	**	**	**	**	**	**	**	447	386	**	**	308
COMPUTER OPERATIONS														
Data Center Manager	(12)	377	**	486	604	511	581	653	725	624	676	707	854	854
Computer Operator	(13)	343	351	344	351	361	355	331	356	388	377	332	432	459
Computer Input/Output Control Manager	(14)	315	484	**	375	**	**	424	333	461	**	386	529	483
Tape Librarian	(15)	**	**	**	**	**	**	**	**	353	454	294	421	408
Data Entry Supervisor	(16)	410	349	436	**	453	395	359	339	384	405	**	390	637
Data Entry Operator	(17)	294	279	322	286	332	329	281	281	261	309	283	354	316
OTHER														
Project/Team Leader	(18)	**	**	**	**	**	**	**	**	730	728	782	798	846
Information Center Manager	(19)	**	**	**	**	**	**	**	**	728	**	734	**	748
Information Center Analyst/Trainer	(20)	**	**	**	**	**	443	470	**	538	520	473	594	631
Manager of Microcomputers	(21)	**	**	**	**	360	**	**	569	579	**	**	613	635
End User Computer Specialist/Office Automation Specialist	(22)	**	**	**	416	**	**	400	**	415	415	418	**	523

*Median—A figure having an equal number above and below
*Mode—The salary reported most often
*25th Percentile—That point at which 25% of all other salaries are lower and 75% are higher
*75th Percentile—That point at which 75% of all other salaries are lower and 25% are higher
**Indicates insufficient information available